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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MING GAO YAO, MASASHI SHIRAISHI,
and YIRU XIE

Appeal 2009-008310
Application 10/634,269
Technology Center 2600

Before ROBERT E. NAPPI, THOMAS S. HAHN, and CARL W.
WHITEHEAD JR., *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

DECISION ON APPEAL¹

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

This is a decision on appeal under 35 U.S.C. § 134(a) of the rejection of claims 1 through 5, 7 through 14, and 16 through 32.

We affirm.

INVENTION

The invention is directed to a method of improving the assembly of hard disk drive heads. See page 2 of Appellants' Specification. Claim 1 is representative of the invention and reproduced below:

1. A system for a magnetic head arm assembly (HAA) comprising:

a first component having a first cavity to be coupled to an arm portion having an arm cavity via insertion of a pin element, independent of the first component and the arm portion, through the first cavity and the arm cavity and welded between said first component and said arm portion, wherein the surface of said pin element is directly attached to and physically connected along a surface of said first component and a surface of said arm portion,

and wherein said first component is selected from the group consisting of a head suspension portion and a flex cable portion.

REFERENCES

Cox	US 5,644,452	Jul. 1, 1997
Cubero Pitel	US 6,160,239	Dec. 12, 2000

REJECTIONS AT ISSUE

The Examiner has rejected claims 1 through 4, 10 through 13, and 19 through 32 under 35 U.S.C. § 102(b) as being anticipated by Cox. Answer² 3 through 5.

The Examiner has rejected claims 5, 7 through 9, 14, and 16 through 18 under 35 U.S.C. § 103(a) as being unpatentable over Cox in view of Cubero Pitel. Answer 5 through 6.

ISSUE

Appellants' contentions directed to the anticipation rejection, on pages 5 and 6 of the Appeal Brief,³ present us with the issue did the Examiner err in finding that Cox teaches a magnetic arm head wherein the surface of the pin element is directly attached to and physically connected along a surface of a first component and a surface of an arm portion as recited in claim 1?

Appellants' contentions directed to the obviousness rejection, on pages 6 and 7 of the Brief, present us with the same issue as presented with respect to the anticipation rejection.

² Throughout this decision we refer to the Examiner's Answer dated December 19, 2008

³ Throughout this decision we refer to the Appeal Brief dated November 5, 2008 and the Reply Brief dated February 19, 2009.

ANALYSIS

Anticipation rejection

Appellants' arguments have not persuaded us that the Examiner erred in finding that Cox teaches a magnetic arm head wherein the surface of the pin element is directly attached to and physically connected along a surface of a first component and a surface of an arm portion. Appellants' arguments focus on the Cox's pin 18 (Figure 1) being of a smaller diameter than the hole 20 (Figure 1). Brief 6. Based upon this, Appellants conclude that the pin is not directly attached to and physically connected to the first arm portion. Brief 6.

In response the Examiner interprets attached to mean to fasten or affix, or join, and states that the pin is directly attached and arm by the solder joint (item 12 Figure 1) and that if it were not attached the pin would fail to hold to components together. Answer 7. We concur with the Examiner's claim interpretation and findings. We note that Claim 1 does not recite a limitation relating the size of the holes to the pin, only that the pin is through the cavities and that the pin is directly attached, and physically connected along a surface. We note that by the doctrine of claim differentiation, claim 1 is broad enough to encompass a hole size which is larger than the pin. For example, dependent claim 9, which further limits claim 1, recites that the hole creates an interference fit, thus, claim 1 is broader and encompasses the situation where the pin is smaller than the hole. We further, note that Cox states, in column 3, lines 39-42, "hole 21 is preferably larger than hole 20" thus the holes may also be the same size, a fact which does not support Appellants' arguments. Accordingly, Appellants' arguments directed to the Examiner's anticipation rejection have

not persuaded us of error in the rejection. Thus, we will sustain the Examiner's rejection of claims 1 through 4, 10 through 13, 19 through 32 under 35 U.S.C. § 102(b).

Obviousness rejection

Appellants' arguments directed to the obviousness rejection assert that it is in error for the same reasons as the anticipation rejection and that Cubero Pitel does not teach the limitations of claim 1. As discussed above, we are not persuaded of error in the Examiner's rejection of claim 1. We note that claim 9 does recite that the pin is an interference fit, and as acknowledged by the Examiner that Cox does not teach this feature. However, the Examiner has found that Cubero Pitel teaches this feature and that it would have been obvious to combine the teachings. Answer 5-6. These findings have not been addressed by Appellants' arguments and as such are uncontested. Accordingly, we sustain the Examiner's obviousness rejection of claims 5, 7 through 9, 14, and 16 through 18 under 35 U.S.C. § 103(a).

CONCLUSION

We will sustain the Examiner's rejection of claims 1 through 4, 10 through 13, 19 through 32 under 35 U.S.C. § 102(b) and of claims 5, 7 through 9, 14, and 16 through 18 under 35 U.S.C. § 103(a).

ORDER

The decision of the Examiner to reject claims 1 through 5, 7 through 14, and 16 through 32 is affirmed.

Appeal 2009-008310
Application 10/634,269

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

ELD

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